

Reroof Checklist

Yes	No	Requirements
		Completed Permit Application
		Contractor License and Insurance Information Current
		Notice of Commencement if the job is valued over \$2500
		A copy of the contract between the owner and the contractor.
		Property Records Card, which can be located at the Lake County Property Appraiser's website at www.lakecopropappr.com
		A roofing plan showing all the pitches and the product approval number for each different pitch (see roofing package for an example) PLYWOOD THICKNESS MUST BE INDICATED.
		Product approval for each different product being installed
		Manufacturer installation specifications that is specific to the job being proposed.
		If this a roof-over, where the existing shingles are not removed, the product approval information must indicate that the shingles were tested in this manner. If the product approval information does not indicate installation over existing shingles, then you will need local product approval and an engineer will need to provide evidence that the installation will provide the same level of protection as the product approval for installation over a wood deck.
		Please indicate the type of underlayment to be installed per 905.1.1.1 FBCR please see attached code section at the end of this checklist

Instructions: Be sure that you have submitted all the items on the list above. All reroof permits will be reviewed by the Building Official or Plans examiner prior to submittal.

The inspection request: We ask that you email your inspection to INSPECTIONREQUEST@ALPHA-INSPECTIONS.NET Please send the request in the following format: Address (156 S. Lake Ave), Type of inspection (Final), Permit Number (123-09-10B), Contact Number of someone that can be contacted the day of the inspection in case there is a problem with either access to the job or a simple problem with the installation. Typical inspection for a reroof are a nailing, dry-in and flashing and a final inspection. The dry-in inspection will consist of felt properly laid and nailed along with flashing and drip edge properly installed, lapped and nailed along with any other roof penetrations. Then a final inspection, which will consist of a visual inspection of the installation as well as a check of the sealing of the starter course around the perimeter of the building as well as any specific requirements by the manufacturer. Metal roofs are quite different and inspections will be dictated by the manufacturer's specifications. You may also use pictures along with an affidavit and skip the nailing and dryin inspections.

Inspection Items: Typical items that get turned down on an reroof inspection include, but are not limited to the following items.

1. Drip edge not properly lapped or fastened.
2. Felt paper run over the drip edge and not properly sealed.
3. Starter course not properly sealed between starter and first shingle. This includes the entire perimeter including the rake. We inspect this by gently lifting up on the edge of the first course of shingle. This shingle should be hard to lift up, but if it comes up very easily, the job will be turned down.
4. Roof penetrations, including the ridge vent not properly sealed. This includes the fasteners required to attach the penetrations to the roof.
5. Blocking required along edges of penetrations exceeding 144 square inches. This is a very common item for off ridge vents. Please be sure to retrofit blocking if not already installed.
6. Improper nailing of deck or over driven fasteners.
7. Felt fastener pattern not correct. The rule of thumb is you should not be able to place a 12'' x 12'' square anywhere on the roof deck without touching a fastener. Please see the permit tech for a fastener schedule.
8. No flashing in areas where there is a change in pitch.
9. Shingles installed that do not meet pitch requirements (too low of a pitch).
10. Shingles trimmed too much or not enough. Follow mfg specs that require anywhere from a $\frac{3}{8}$ '' to $\frac{1}{4}$ '' overhang over the drip edge.
11. Permit card must be posted on the job and visible from the road as soon as work is started.
12. For roofs with affidavit, incomplete pictures not showing all phases of work...

To Schedule An Inspection - email: inspectionrequest@alpha-inspections.net	<h1 style="margin: 0;">Permit Application</h1>	In addition to this permit, you may be required to receive approval from other State of Federal agencies prior to commencing work	Permit Number
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You must submit 3 copies of this form. Only 1 has be notarized if signed prior to coming to City Hall.

Project Address	
Project Description	Reroof

Property ID Key/Number		Parcel Number	Not Required
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Owner's Name	Mailing Address	City, State, Zip	Telephone
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General Contractor	Mailing Address	City, State, Zip	Telephone
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Construction Contractor	Mailing Address	City, State, Zip	Telephone
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Not Required			
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Electrical Contractor	Mailing Address	City, State, Zip	Telephone
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Not Required			
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Plumbing Contractor	Mailing Address	City, State, Zip	Telephone
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Not Required			
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Roofing Contractor	Mailing Address	City, State, Zip	Telephone
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Legal Description	Not Required
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Bonding Company	Not Required
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Bonding Company Address	Not Required
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Architect's Name	Not Required
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Architect's Address	Not Required
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Project Information

Subdivision Name	Phase	Lot No.	Model	Elevation	Lot Area	Impervious Surface Ratio
	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required

Flood Zone	Not Required
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Setbacks Provided over Required (ft)

Front	Not Required	Rear	Not Required	Side	Not Required	Corner	Not Required	Street Side	Not Required
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Project	Area	Electrical	Hvac	Water	Meter
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New		Living	Not Required	Service Size	Type	Municipal		Size	Not Required
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Alteration	<input checked="" type="checkbox"/>	Garage		Not Required	Not Required	Well			
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Addition		Porch(s)							
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Repair		Other			Airhandler	Not Required	Sewer		
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Other		Total	Not Required		Condenser	Not Required	Septic		
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Garage	Number of Bedrooms	Value	Code In Effect
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Attached			
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Detached		Not Required	2020 FBC
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Applicant Signature	Date
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WARNING TO OWNER: Your failure to record a Notice of Commencement may result in your paying twice for improvements to your property. If you intend to obtain financing, consult with your lender or an attorney before recording your Notice of Commencement. The issuance of a building permit does not assure the building setbacks have been met or that the structure does not encroach on an easement. The owner and/or contractor have the sole responsibility of determining compliance with setbacks and non-encroachment of easements. Permits expire 6 months after issuance. You are responsible for the completion of the permit, inspections, and all Re-Inspection Fees.

The foregoing instrument was acknowledged before me this _____ day of _____, 20____, by _____ who is personally known to me or has produced _____ as identification and who did _____ or did not _____ take an oath.

(Seal)
Notary Public

OWNER/BUILDER Disclosure Statement

F.S. Chapter 489, CONTRACTING; PART 1 CONSTRUCTION CONTRACTING (SS 489.103)

State law requires construction to be done by licensed contractors. You have applied for a permit under an exemption to that law. The exemption allows you, as the owner of your property, to act as your own contractor even though you do not have a license. You must supervise the construction yourself. You may build or improve a commercial building at a cost of \$25,000 or less. The building must be for your own use and occupancy. It may not be built for sale or lease. If you sell or lease a building you have built yourself within 1 year after the construction is complete, the law will presume that you built it for sale or lease, which is a violation of this exemption. You may not hire an unlicensed person as your contractor. It is your responsibility to make sure that people employed by you have licenses required by state law and by county or municipal licensing ordinances. **Any person working on your building who is not licensed must work under your supervision and must be employed by you, which means that you must deduct FICA and withholding tax and provide worker's compensation for that employee, all as prescribed by law.** Your construction must comply with all applicable laws, ordinances, building codes, and zoning regulations.

Any person who aids and abets unlicensed contractors or subcontractors will face imposed penalties as provided by law.

Section 6. Subsection (1) of Section 455.228 Florida Statutes F.S. 455.228 Unlicensed practice of a profession; cease and desist notice; civil penalty; enforcement.--- (1) When the department has probable cause to believe that any person not licensed by the department or the appropriate regulatory board within the department or the appropriate regulatory board within the department has violated any provision of this chapter or any statute that relates to the practice of a profession regulated by the department, or any rule adopted pursuant thereto, the department may issue and deliver to such person a *notice to cease and desist* from such violation. In addition, the department may issue and deliver a notice to cease and desist to any person who aids and abets the unlicensed practice of a profession by employing such unlicensed person. For the purpose of enforcing a cease and desist order, the department may file a proceeding in the mane of the state seeking *issuance of an injunction or a writ of mandamus* against any person who violates any provisions of such order. **In addition to the foregoing remedies, the department may impose an administrative penalty not to exceed \$5,000.00 per incident, pursuant to F.S. 120.58, it shall be entitled to collect its attorney's fees and costs, together with any cost of collection.** This _____ Day of _____ The Year _____, I, The Undersigned, Have Read The Preceding And Understand The Responsibility Of Acting As My Own Contractor, And Having Been Noticed Of The Above Florida Statutes, Will Abide By The Laws Governing Lake County And The State Of Florida. I further state that I have the knowledge and ability to do the work proposed, and I assume full responsibility for familiarizing myself with all Lake County Codes and building regulations. In the event a building inspector requires corrections to be made, I will make such corrections and call for a re-inspection before proceeding. I understand the Building Division is not responsible for instructing me on what to do. I understand I may subject myself to code enforcement action by not requesting and obtaining, Final Inspection Approval prior to engaging in the use of the proposed development. _____ Signature of Owner/Builder

State of Florida
County of Lake

I hereby certify that on this day, before me, an officer duly authorized in the State and County aforesaid to take acknowledgements, personally appeared _____ who is personally known to me or who has produced _____ as identification and who did/did not take an oath.

Witness my hand and official seal this _____ day of _____, 19 _____.

Notary Public

After recording return to:

Permit No: _____
Tax Folio or Alternate Key #: _____

NOTICE OF COMMENCEMENT
Astatula, Clermont, Eustis, Fruitland Park, Howey in the Hills,
Groveland, Lady Lake, Lake County, Leesburg, Mascotte,
Minneola, Montverde, Mount Dora, Tavares, Umatilla

The undersigned hereby gives notice that improvement will be made to certain real property, and in accordance with Chapter 713, Florida Statutes, the following information is provided in this Notice of Commencement.

1. Description of property: (legal description of the property, and street address if available)

Street Address: _____
2. General description of improvement: _____
3. Owner's Information: Name: _____
Address: _____
Interest in Property: _____
Name and Address of fee simple titleholder (if other than owner): _____

4. Contractor Information: Name: _____
Address: _____
Telephone No. _____ Fax No. (Opt.) _____
5. Surety Information: Name: _____
Address: _____
Telephone No. _____ Fax No. (Opt.) _____
Amount of Bond: _____
6. Lender Information: Name: _____
Address: _____
Telephone No. _____ Fax No. (Opt.) _____
7. Persons within the State of Florida designated by Owner upon whom notices or other documents may be served as provided by Section 713.13(1)(a)7., Florida Statutes:
Name: _____
Address: _____
Telephone No. _____ Fax No. (Opt.) _____
8. In addition to himself or herself, Owner designates _____ of _____
to receive a copy of the following Lienor's Notice as Provided in Section 713.13(1) (b), Florida Statutes:
Name: _____
Address: _____
Telephone No. _____ Fax No. (Opt.) _____
9. Expiration date of notice of commencement (the expiration date is 1 year from the date of recording unless a different date is specified) _____.

WARNING TO OWNER: ANY PAYMENTS MADE BY THE OWNER AFTER THE EXPIRATION OF THE NOTICE OF COMMENCEMENT ARE CONSIDERED IMPROPER PAYMENTS UNDER CHAPTER 713, PART I, SECTION 713.13, FLORIDA STATUTES, AND CAN RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT YOUR LENDER OR AN ATTORNEY BEFORE COMMENCING WORK OR RECORDING YOUR NOTICE OF COMMENCEMENT.

Signature of Owner or Owner's Authorized Officer/Director /Partner /Manager

Printed Name & Signatory's Title/Office

The foregoing instrument was acknowledged before me this _____ day of _____, 20_____, by _____
who is personally known to me or has produced _____ as identification and who did or did not take an oath.

Signature of Notary Public - State of Florida

Print, type or Stamp Commissioned Name of Notary Public

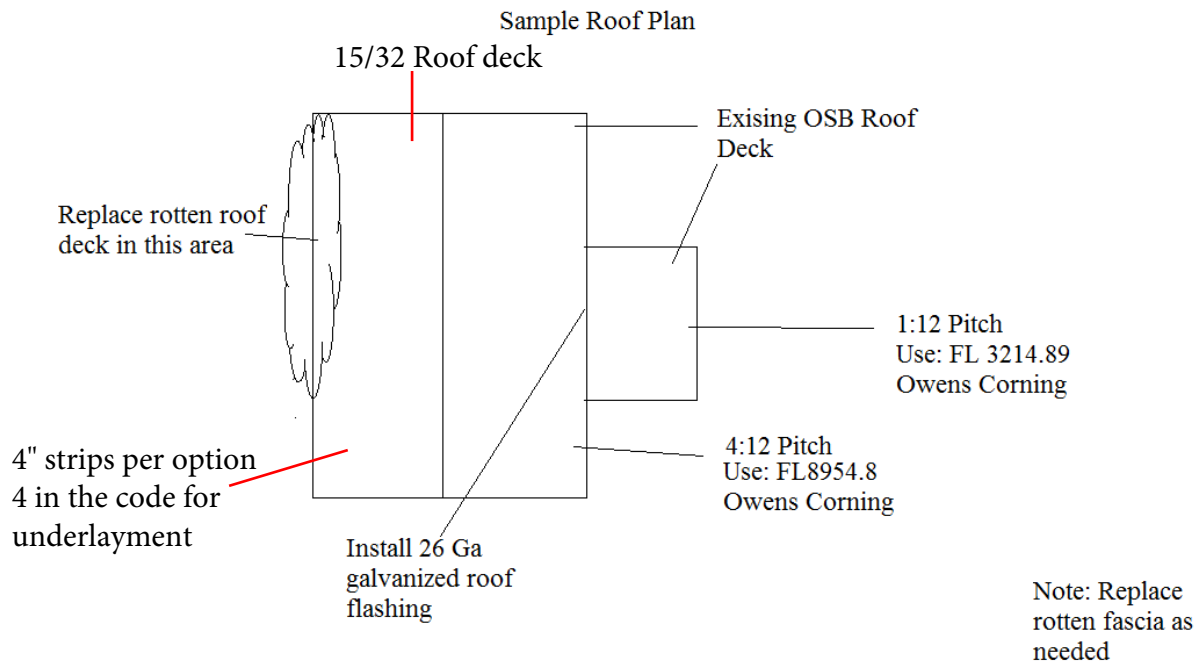
Verification pursuant to Section 92.525, Florida Statutes

Under penalties of perjury, I declare that I have read the foregoing and that the facts stated in it are true to the best of my knowledge and belief.

Signature of Natural Person (Owner) Signing Above

Reroof Plan

1. It's very important for both the review and the inspection to have a good roofing plan. Below is a sample of what we expect to be submitted. Important to us is the pitch of the roof, the existing substrate (1/2 plywood, 15/32 OSB, 1x12's etc), the proposed material to be installed along with the appropriate FL product approval number. Please note that different pitch roofs may require different products, so please be sure to list all proposed FL product approval numbers.
2. Additional information to be submitted include any material that is being replaced such as rotten roof decking, rotten fascia boards and any trusses that need to be repaired. Please note that this information will be helpful to determine if the scope of work exceeds what is allowed by a roofing contractor. Structural repairs that require engineering will also require a licensed general contractor.
3. Please also note that areas that require flashing should also be noted on the plans as to the type and thickness. Please see sample plan for more details.



LICENSED ROOFING CONTRACTORS ONLY

Reroofing Inspection Affidavit
Nailing, Sheathing, Dry-In & Flashing

REROOF ONLY – NOT NEW CONSTRUCTION

Permit No: _____ Address: _____

I _____, as a(n) General*, Building*, Residential*, or Roofing Contractor, Engineer, Architect, or F.S. Chapter 468 Building Inspector, I hereby affirm, that all of the foregoing information is true and accurate and that the sheathing, nailing, dry-in, and flashings at the above referenced address/lot have been installed in accordance with the attached scope of work, complying with all applicable codes and standards. Based upon my examination I have determined the installation was done in conformance to the Hurricane Mitigation Retrofit Manual (Based on F.S. Chapter 553.844).

License #: _____

Company/Contractor: _____

Contractor's Signature: _____ Date: _____

(Must be signed by license holder)

A final roofing inspection is required:

This signed and notarized affidavit must be provided at the job site at the time of the final roofing inspection along with digital photographs of each plane of the roof with the permit number or address number clearly marked on the deck for each inspection. The photographs must include a ruler or measuring device to confirm nail spacing and overlaps including drip edge and valley flashing.

STATE OF FLORIDA
COUNTY OF _____

The foregoing instrument was acknowledged before me this ___ day of _____, 20___, by _____ who is personally known to me ___or has produced _____ as identification and who ___did or ___did not take an oath.

Notary Public

Printed Name: _____

My Commission Expires: _____

*No general, building, or residential contractor certified after 1973 shall act as, hold himself or herself out to be, or advertise himself or herself to be a roofing contractor unless he or she is certified as a roofing contractor.

R905.1.1.1 Underlayment for asphalt, metal, mineral surfaced, slate and slate-type roof coverings.

Underlayment for asphalt shingles, metal roof shingles, mineral surfaced roll roofing, slate and slate-type shingles, and metal roof panels shall comply with one of the following methods:

1. The entire roof deck shall be covered with an approved self-adhering polymer-modified bitumen underlayment complying with ASTM D1970 installed in accordance with both the underlayment manufacturer's and roof covering manufacturer's installation instructions for the deck material, roof ventilation configuration and climate exposure for the roof covering to be installed.

Exception: An existing self-adhering modified bitumen underlayment that has been previously installed over the roof decking and where it is required, renailling off the roof sheathing in accordance with Section R908.7.1 can be confirmed or verified. An approved underlayment in accordance with Table R905.1.1.1 for the applicable roof covering shall be applied over the entire roof over the existing self-adhered modified bitumen underlayment.

2. A minimum 4-inch-wide (102 mm) strip of self-adhering polymer-modified bitumen membrane complying with ASTM D1970, installed in accordance with the manufacturer's instructions for the deck material, shall be applied over all joints in the roof decking. An approved underlayment in accordance with Table R905.1.1.1 for the applicable roof covering shall be applied over the entire roof over the 4-inch-wide (102 mm) membrane strips.

Exception: A synthetic underlayment that is approved as an alternative to underlayment complying with ASTM D226 Type II and having a minimum tear strength of 15 lbf in accordance with ASTM D4533 and a minimum tensile strength of 20 lbf/inch in accordance with ASTM D5035 shall be permitted to be applied over the entire roof over the 4-inch-wide (102 mm) membrane strips. This underlayment shall be installed and attached in accordance with the underlayment attachment methods of Table R905.1.1.1 for the applicable roof covering and slope and the underlayment manufacturer's installation instructions.

3. A minimum $3\frac{3}{4}$ -inch wide (96 mm) strip of self-adhering flexible flashing tape complying with AAMA 711, Level 3 [for exposure up to 176°F (80°C)], installed in accordance with the manufacturer's instructions for the deck material, shall be applied over all joints in the

roof decking. An approved underlayment in accordance with Table R905.1.1.1 for the applicable roof covering shall be applied over the entire roof over the 4-inch-wide (102 mm) flashing strips.

Exception: A synthetic underlayment that is approved as an alternative to underlayment complying with ASTM D226 Type II and having a minimum tear strength of 15 lbf in accordance with ASTM D4533 and a minimum tensile strength of 20 lbf/inch in accordance with ASTM D5035 shall be permitted to be applied over the entire roof over the 4-inch-wide (102 mm) flashing strips. This underlayment shall be installed and attached in accordance with the underlayment attachment methods of Table R905.1.1.1 for the applicable roof covering and slope and the underlayment manufacturer's installation instructions.

4. Two layers of ASTM D226 Type II or ASTM D4869 Type III or Type IV underlayment shall be installed as follows: Apply a 19-inch (483 mm) strip of underlayment felt parallel to and starting at the eaves, fastened sufficiently to hold in place. Starting at the eave, apply 36-inch-wide (914 mm) sheets of underlayment, overlapping successive sheets 19 inches (483 mm); end laps shall be 6 inches and shall be offset by 6 feet. The underlayment shall be attached to a nailable deck with corrosion-resistant fasteners with one row centered in the field of the sheet with a maximum fastener spacing of 12 inches (305 mm) o.c., and one row at the end and side laps fastened 6 inches (152 mm) o.c. Underlayment shall be attached using annular ring or deformed shank nails with metal or plastic caps with a nominal cap diameter of not less than 1 inch. Metal caps are required where the ultimate design wind speed, V_{ult} , equals or exceeds 170 mph. Metal caps shall have a thickness of not less than 32-gage sheet metal. Power-driven metal caps shall have a minimum thickness of 0.010 inch. Minimum thickness of the outside edge of plastic caps shall be 0.035 inch. The cap nail shank shall be not less than 0.083 inch for ring shank cap nails. Cap nail shank shall have a length sufficient to penetrate through the roof sheathing or not less than $\frac{3}{4}$ inch into the roof sheathing.
5. Two layers of a reinforced synthetic underlayment that has a product approval as an alternative to underlayment complying with ASTM D226 Type II shall be permitted to be used. Synthetic underlayment shall have a minimum tear strength of 15 lbf in accordance with ASTM D4533 and a minimum tensile strength

ROOF ASSEMBLIES

TABLE R905.1.1.1
UNDERLAYMENT WITH SELF-ADHERING STRIPS OVER ROOF DECKING JOINTS

ROOF COVERING	UNDERLAYMENT TYPE	UNDERLAYMENT ATTACHMENT	
		2:12 = ROOF SLOPE < 4:12	ROOF SLOPE > 4:12
Asphalt Shingles, Metal Roof Panels, Photovoltaic Shingles	ASTM D226 Type II ASTM D4869 Type III or IV ASTM D6757	Apply in accordance with Section R905.1.1.1, Item 4 or Section R905.1.1.3, Item 3 as applicable to the type of roof covering.	Underlayment shall be applied shingle fashion, parallel to and starting from the eave and lapped 4 inches (51 mm); end laps shall be 6 inches and shall be offset by 6 feet. The underlayment shall be attached to a nailable deck with two staggered rows in the field of the sheet with a maximum fastener spacing of 12 inches (305 mm) o.c., and one row at the end and side laps fastened 6 inches (152 mm) o.c. Underlayment shall be attached using annular ring or deformed shank nails with metal or plastic caps with a nominal cap diameter of not less than 1 inch. Metal caps are required where the ultimate design wind speed, V_{ult} , equals or exceeds 170 mph. Metal caps shall have a thickness of not less than 32-gage sheet metal. Power-driven metal caps shall have a minimum thickness of 0.010 inch. Minimum thickness of the outside edge of plastic caps shall be 0.035 inch. The cap nail shank shall be not less than 0.083 inch for ring shank cap nails and 0.091 inch for smooth shank cap nails. Cap nail shank shall have a length sufficient to penetrate through the roof sheathing or not less than $\frac{3}{4}$ inch into the roof sheathing.
Metal Roof Shingles, Mineral-Surface Roll Roofing, Slate and Slate-type Shingles, Wood Shingles, Wood Shakes	ASTM D226 Type II ASTM D4869 Type III or IV		

of 20 lbf/inch in accordance with ASTM D5035, and shall meet the liquid water transmission test of Section 8.6 of ASTM D4869. Synthetic underlayment shall be installed as follows: Apply a strip of synthetic underlayment that is half the width of a full sheet parallel to and starting at the eaves, fastened sufficiently to hold in place. Starting at the eave, apply full sheets of reinforced synthetic underlayment, overlapping successive sheets half the width of a full sheet plus the width of the manufacturer's single-ply overlap. End laps shall be 6 inches and shall be offset by 6 feet. Synthetic underlayment shall be attached to a nailable deck with corrosion-resistant fasteners with a maximum fastener spacing, measured horizontally and vertically, of 12 inches (305 mm) o.c. between side laps, and one row at the end and side laps fastened 6 inches (152 mm) o.c. Synthetic underlayment shall be attached using annular ring or deformed shank nails with metal or plastic caps with a nominal cap diameter of not less than 1 inch. Metal caps are required where the ultimate design wind speed, V_{ult} , equals or exceeds 170 mph. Metal caps shall have a thickness of not less than 32-gage sheet metal. Power-driven metal caps shall have a minimum thickness of 0.010 inch. Minimum thickness of the outside edge of plastic caps shall be 0.035 inch. The cap nail shank shall be not less than 0.083 inch for ring shank cap nails. Cap nail shank shall have a length sufficient to penetrate through the roof sheathing or not less than $\frac{3}{4}$ inch into the roof sheathing.

R905.1.1.2 Underlayment for concrete and clay tile. Underlayment for concrete and clay tile shall comply with Section 905.3.3.

R905.1.1.3 Underlayment for wood shakes and shingles. Underlayment for wood shakes and shingles shall comply with one of the following methods:

1. A minimum 4-inch-wide (102 mm) strip of self-adhering polymer-modified bitumen membrane complying with ASTM D1970, installed in accordance with the manufacturer's instructions for the deck material, shall be applied over all joints in the roof decking. An approved underlayment in accordance with Table R905.1.1.1 for the applicable roof covering shall be applied over the entire roof over the 4-inch-wide (102 mm) membrane strips.
2. A minimum $3\frac{3}{4}$ -inch wide (96 mm) strip of self-adhering flexible flashing tape complying with AAMA 711, Level 3 [for exposure up to 176°F (80°C)], installed in accordance with the manufacturer's instructions for the deck material, shall be applied over all joints in the roof decking. An underlayment complying with Table R905.1.1.1 for the applicable roof covering shall be applied over the entire roof over the 4-inch-wide (102 mm) flashing strips.
3. Two layers of ASTM D226 Type II or ASTM D4869 Type III or Type IV underlayment shall be installed as follows: Apply a 19-inch (483 mm) strip of underlayment felt parallel to and starting at the eaves, fastened sufficiently to hold in place. Starting at the eave, apply 36-inch-wide (914 mm) sheets of underlayment, overlapping successive sheets 19 inches (483 mm); end laps shall be 6 inches and shall be offset by 6 feet. The underlayment shall be attached to a nailable deck with corrosion-resistant fasteners with one row centered in the field of the sheet with a maximum fastener spacing of 12 inches (305 mm) o.c., and one row at the end and side laps fastened 6 inches

(152 mm) o.c. Underlayment shall be attached using annular ring or deformed shank nails with metal or plastic caps with a nominal cap diameter of not less than 1 inch. Metal caps are required where the ultimate design wind speed, V_{ult} , equals or exceeds 170 mph. Metal caps shall have a thickness of not less than 32-gage sheet metal. Power-driven metal caps shall have a minimum thickness of 0.010 inch. Minimum thickness of the outside edge of plastic caps shall be 0.035 inch. The cap nail shank shall be not less than 0.083 inch for ring shank cap nails. Cap nail shank shall have a length sufficient to penetrate through the roof sheathing or not less than $\frac{3}{4}$ inch into the roof sheathing.

R905.1.2 Ice barriers. Reserved.

R905.2 Asphalt shingles. The installation of asphalt shingles shall comply with the provisions of this section or RAS 115.

R905.2.1 Sheathing requirements. Asphalt shingles shall be fastened to solidly sheathed decks.

R905.2.2 Slope. Asphalt shingles shall be used only on roof slopes of two units vertical in 12 units horizontal (2:12) or greater. For roof slopes from two units vertical in 12 units horizontal (2:12) and less than four units vertical in 12 units horizontal (4:12), double underlayment application is required in accordance with Section R905.1.1.

R905.2.3 Underlayment. Underlayment shall comply and be installed in accordance with Section R905.1.1.

R905.2.4 Asphalt shingles. Asphalt shingles shall comply with ASTM D3462.

R905.2.4.1 Wind resistance of asphalt shingles. Asphalt shingles shall be installed in accordance with Sections R905.2.6 and R905.2.6.1.

Table R905.2.4.1 Classification of Asphalt Roof Shingles. Reserved.

R905.2.5 Fasteners. Fasteners for asphalt shingles shall be galvanized steel, stainless steel, aluminum or copper roofing nails, minimum 12-gage [0.105 inch (3 mm)] shank with a minimum $\frac{3}{8}$ -inch-diameter (9.5 mm) head, complying with ASTM F1667, of a length to penetrate through the roofing materials and not less than $\frac{3}{4}$ inch (19.1 mm) into the roof sheathing. Where the roof sheath-

ing is less than $\frac{3}{4}$ inch (19.1 mm) thick, the fasteners shall penetrate through the sheathing.

Exception: If the architectural appearance is to be preserved from below, an alternate method of attachment complying with the wind load requirements of Chapter 16 of the *Florida Building Code, Building* may be proposed unless otherwise addressed in Chapter 9. The alternative attachment shall be prepared, signed and sealed by a Florida-registered architect or a Florida-registered engineer, which architect or engineer shall be proficient in structural design.

R905.2.6 Attachment. Asphalt shingles shall have the minimum number of fasteners required by the manufacturer, but not less than four fasteners per strip shingle or two fasteners per individual shingle. Where the roof slope exceeds 21 units vertical in 12 units horizontal (21:12, 175-percent slope), shingles shall be installed as required by the manufacturer.

R905.2.6.1 Classification of asphalt shingles. Asphalt shingles shall be classified in accordance with ASTM D3161, TAS 107 or ASTM D7158 to resist the basic wind speed per Figure R301.2(4). Shingles classified as ASTM D3161 Class D or classified as ASTM D7158 Class G are acceptable for use where V_{asd} is equal to or less than 100 mph. Shingles classified as ASTM D3161 Class F, TAS 107 or ASTM D7158 Class H are acceptable for use for all wind speeds. Asphalt shingle wrappers shall be labeled to indicate compliance with one of the required classifications, as shown in Table R905.2.6.1.

R905.2.7 Ice barrier. Reserved.

R905.2.8 Flashing. Flashing for asphalt shingles shall comply with this section or RAS 111.

R905.2.8.1 Base and counter flashing. Base and counter flashing shall be installed as follows:

1. in accordance with manufacturer's installation instructions, or
2. in compliance with RAS 111, or
3. a continuous metal minimum 4 inch by 4 inch "L" flashing shall be set in approved flashing cement and set flush to base of wall and over the underlayment. Both horizontal and vertical metal

**TABLE R905.2.6.1
CLASSIFICATION OF ASPHALT SHINGLES**

Maximum Basic Wind Speed, V_{ult} From Figure R301.2(4)	V_{asd} as determined in accordance with Section R301.2.1.3	ASTM D7158	ASTM D3161
110	85	D, G or H	D or F
116	90	D, G or H	D or F
129	100	G or H	D or F
142	110	G or H	F
155	120	G or H	F
168	130	H	F
181	140	H	F
194	150	H	F